

**INTEGRATED PROGRAMMABLE FIRE PULSE  
GENERATOR FOR INKJET PRINthead ASSEMBLY**

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**Abstract of the Disclosure**

An inkjet printhead assembly includes at least one inkjet printhead having nozzles and firing resisters. The inkjet printhead assembly includes fire pulse generator circuitry responsive to a start fire signal to generate fire signals, each having a series of fire pulses. The fire pulse generator circuitry generates the fire signals by controlling the initiation and duration of the fire pulses. The fire pulses control timing and activation of electrical current through the firing resisters to thereby control ejection of ink drops from the nozzles. One embodiment of the inkjet printhead assembly includes multiple printheads disposed on a carrier to form a wide-array inkjet printhead assembly.

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